

A

PLAIN TREATISE

ON

CHOLERA:

(BEING A CHAPTER *EXTRACTED FROM DR. RALPH'S GUIDE TO DOMESTIC MEDICINE.)

INTENDED FOR THE USE OF

PRIVATE INDIVIDUALS;

SHOWING ITS NATURE, CAUSES AND SYMPTOMS, WITH DIRECTIONS FOR
ITS TREATMENT, &c.

It is on the immediate and decisive treatment of Cholera, that the life of the sufferer chiefly depends; and it is, therefore, the duty of every individual to understand so much of the nature and treatment of this disorder as to be able, upon his own knowledge, to attack it where and whensoever it appears. The following remarks are published for this purpose;—they are written in the plainest possible manner, and sufficiently point out to every one the safest measures to adopt in the various forms and stages of this alarming malady.

To this is added—A list of articles to be kept in readiness by every family, and by every person going on a journey.

Also—Directions for avoiding an attack of CHOLERA.

BY DR. RALPH,

Graduate of the University of Edinburgh; Member of the Royal College
of Surgeons, London, &c. &c.

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CHOLERA.

(EXTRACTED FROM THE GUIDE TO DOMESTIC MEDICINE.)

[The few following pages, embody the substance of a Chapter on Cholera, extracted from "a Guide to Domestic Medicine," (now in press,) by Dr. Ralph, of N. Y. They exhibit all that is known and practical on this subject, in the plainest manner, and are, therefore, calculated for general usefulness, at the present period of alarm and danger. Under this impression they are now published in the cheap and convenient form of a Tract, or small Treatise.]

CHAPTER IX.

CHOERA, OR CHOLERA MORBUS.

The disease which is to be the subject of this section, having so lately raged in this and many other countries, in the form of a severe and very fatal epidemic, it seems a matter greatly to be desired that every individual should be so far instructed with regard to the nature and treatment of this awful malady, as to be able from his own knowledge, immediately to attack it where and whensoever it may make its appearance, and to conduct its cure upon some plain and correct principle. There is no particular reason to apprehend that this disease will again return in the same rapid and fearful form in which we have so lately seen it; yet such an event is by no means impossible; and, moreover, we are at all times liable to the milder attacks of Cholera; and, indeed, in the months of July and August, as also in the fall of the year, this disease is very apt to become more or less an epidemic.

For this reason, as well as that the life of the sufferer very often depends upon the prompt and decisive measures which are adopted, the writer is anxious to render this disease and the treatment of it as plain as possible; and with this intention he proposes to arrange the remarks he has to make upon the subject of cholera, in the following order:

The nature of the disease termed Cholera, or Cholera morbus.

How to distinguish cholera from disorders which in some degree resemble it.

The causes of cholera.

Objects to be aimed at in the treatment of cholera, also, a list of materials which should be kept in readiness for their accomplishment.

On the different kinds of cholera;—the symptoms which mark them;—and the particular manner of administering the remedies already mentioned in each variety of the disease.

Bilious cholera, or cholera morbus.

Flatulent cholera.

Spasmodic, or Asiatic cholera, its symptoms and treatment.

The treatment of the premonitory symptoms of cholera.

Means for securing general health during the prevalence of cholera.

THE NATURE OF THE DISEASE TERMED CHOLERA, OR CHOLERA MORBUS.

It is to be remarked, that in this complaint, the liver is the organ which is always first affected, and from this source proceeds every circumstance which is observed subsequently to take place. In what this altered state of the liver consists, has not hitherto been ascertained, but the consequence of it is, that the secretion of this organ, that is to say the bile, becomes of an irritating and poisonous quality. In common cholera morbus the bile is generally very much increased in quantity, but this is not the case in all the varieties of cholera, on the contrary, in some it is even deficient, and again at other times, though not deficient, it is nevertheless shut up by spasm in the liver and gall-duct, so that there is no appearance of

bile in what is thrown off by the stomach and bowels. With regard to the color of the fluid evacuated, this also varies ; in the milder and common cases of cholera morbus, this is yellow and looks like an overflowing of pure, unmixed bile, but in the more severe forms of this disease, the evacuations both of the stomach and bowels are watery, or like water in which fresh meat or rice has been washed.

Further, we observe a striking tendency to spasm. Cramp in the limbs, with spasmodic affections, more or less universal, and which sometimes extend to every organ of the body, is a peculiar characteristic of this disease. Much of this spasmodic affection may be accounted for on the principle of the irritating acrimony of the bile, occurring in a weak and excitable condition of the body, but, independently of this and other causes, there is in cholera a tendency to spasmodic affection which is peculiar to the disease.

It does not seem that there is any essential difference in the nature of cholera, under whatsoever form it appears, and if we examine and compare the common cholera morbus with those severe and fatal cases of spasmodic cholera which occurred in the late epidemic, it will be seen that the difference consisted more in the violence and rapidity of the circumstances attending each, than in any peculiarity in the nature of the disease itself. In every case the liver is the seat and centre of all that follows, while the violence and fatality of every attack depends chiefly on the following circumstances :—the concentrated poisonous quality of the bile ;—the ease or difficulty with which it is carried off from the body, and the natural resources of each individual to supply the exhausting vital power.

With regard to the nature of cholera, therefore, it may be stated in few words ;—it is a disease in which the liver is disordered, and secretes an acrid and poisonous bile ; this quickly disturbs the stomach and intestinal passages, and through them the nervous system ;—hence, vomiting, purging and spasm. Such are the symptoms which are characteristic of cholera, and they are violent and fatal in proportion to the intensity of the disease of the liver. In the most severe attacks, the spasm is so extreme and universal, as to shut up the poisonous bile in the liver, and the gall-bladder, and the vital power becomes most rapidly exhausted ; when this takes place, the

patient is said to be in a state of collapse, and death is then generally near at hand. Some severe cases have thus proved fatal in less than six hours.

HOW TO DISTINGUISH CHOLERA FROM OTHER DISORDERS WHICH IN SOME DEGREE RESEMBLE IT.

During the panic of mind which prevails at the time of an epidemic, almost every disorder which occurs, especially those which relate to the state of the stomach and bowels, are construed into a case of cholera, and much confusion and unnecessary alarm is frequently the consequence. The disorders which are most likely to be mistaken for cholera, are, dysentery, cholic, and common diarrhœa, or summer complaint; but if what has been said on the nature of cholera, be kept in mind, it will generally be an easy matter to distinguish it from these disorders.

For instance, dysentery may be known by the stools being slimy, not bilious or watery, and often streaked with blood. Further, these evacuations are generally mixed with portions of common stool, and in the intervals of griping, there is more or less of a constant pain about the fundament. These symptoms, together with the absence of cramp and spasm, will be a sufficient guide to distinguish the disease of dysentery from that of cholera.

In Cholic, and particularly in the painter's cholic, it is true that there is frequently a copious vomiting of bile, while the bowels always remain obstinately costive; nothing whatever can be made to pass by stool; and this striking circumstance will afford a distinctive mark between the cholic and the cholera.

In Diarrhœa, or common summer complaint, the evacuations are more or less watery, but they are not bilious. Neither is there fever, vomiting, or cramp and spasms.

THE CAUSES OF CHOLERA.

With regard to the remote cause, or the reason why the cholera should sometimes become an Epidemic,—this is a matter perfectly unknown to every one. Certain circumstances, such as heat alone, or heat combined with moisture, seem to favor its appearance; but there is something more than these, and that which no person has

yet been able to detect, which gives existence to the Epidemic form of cholera. It has prevailed even in cold and dry, as well as in hot and swampy districts.

As to the question of its contagious nature,—that is to say, whether cholera is communicated from person to person, or only by the agency of some peculiar, but unknown state of the atmosphere, this has been a subject of much debate. Those who have seen most of the disease, and are therefore by far the most capable of judging, are decidedly of opinion that cholera is not contagious, and in this opinion the writer perfectly agrees. In his judgment the disease cannot be taken by any one, in consequence of attending upon, and nursing those that are affected with it, and those who withhold their personal assistance from their friends or neighbours on this ground, are under a delusion.

But if little or nothing is known with regard to the nature of that cause, which gives the cholera an epidemic character, this cannot be said of the immediate causes which produce it. Much that is important and very practical is known on this subject, and it is the duty of every individual to become acquainted with such causes, and carefully to avoid them. Amongst the most important of this kind, may be mentioned,—intemperance, and irregularities of any kind; perspiration suddenly suppressed, particularly by cold and damp applied to the feet, as by long standing on cold, damp bricks or stones;—cold drink, especially if taken when heated by exercise;—cold, indigestible fruits, as unripe apples and pears, cucumbers, melons, &c.;—also, any violent purgative medicine;—a state of costiveness;—a neglected bowel complaint, or such a state mistreated by laudanum or astringents. Fear also may be considered to be a cause, as well as every thing which has a tendency to depress the spirits and exhaust the strength of the body.

Objects to be aimed at in the treatment of Cholera, and also a list of materials which should be kept in readiness for their accomplishment.

The objects to which your endeavours are to be directed in the case of an attack of cholera, are, to dilute, evacuate, and wash out the acrid bile from the passages, both by the stomach and bowels;—to moderate the vomiting and purging;—to allay the cramp and spasm,—and to prop up and support the sinking powers of life. Now

to effect these purposes, especially in the time of cholera, every one ought to have in his house, or carry with him on a journey, the following articles :—

- 1st. Some pearl barley, or oatmeal grits, or some gum arabic, or all of these.
- 2d. A box of five grain calomel pills.
- 3d. A bottle of castor oil.
- 4th. A two-ounce bottle of laudanum.
- 5th. A box of one grain opium pills.
- 6th. A packet of Dr. Ralph's improved Hygeian Pills.
- 7th. An instrument for giving an injection, or a common glyster-pipe and bladder.

On the different kinds of cholera, the symptoms which mark them, and the particular manner of administering the remedies already mentioned, in each variety of the disease.

There are three kinds or species of cholera,—the *Bilious*, commonly called *Cholera Morbus*,—the *Flatulent Cholera*,—and the *Spasmodic*, or *Asiatic Cholera*.

BILIOUS CHOLERA, OR CHOLERA MORBUS.

This is the first species, and is the mildest. It is the common cholera of our summer months. At such times it frequently becomes more or less an Epidemic, but it seldom gives occasion to much alarm, being usually mild and tractable. The manner in which this disease comes on, is as follows : a person complains, perhaps for a day or two or more, of uneasiness about the stomach and bowels ; he is flatulent and feels some griping pains ;—at length he is suddenly seized with vomiting and purging, and after the first few evacuations, the discharges consist of pure yellow bile, both upwards and downwards. To this pretty quickly succeeds cramps in the legs and arms ; this is sometimes rather severe, and at other times very slight, but there is almost always cramp or spasm in some degree or other. In mild cases the vomiting and purging abate in a day or two, and the patient gradually recovers his full health.

In this form of the disorder, that is to say, in common cholera mor-

bus, there is always free vomiting and purging, and it would not be proper, therefore, to irritate the stomach further by emetics and purgatives. The more rational object of anxiety is to dilute and bring away the acrid bile, and to defend the passages from its irritating properties. For this purpose, it is recommended to drink freely and repeatedly of warm gruel, barley or rice water, or water in which gum arabic has been dissolved. These are soon prepared, having the ingredients already at hand, and it often happens that nothing else is necessary. These drinks cannot be taken to excess in this stage of the complaint.

If the vomiting or purging be excessive, or when they continue from weakness after the flow of bile has considerably diminished; then, these drinks should be exchanged for mint tea, or strong toast water, or strong green tea, and if these be not sufficient to check the ineffectual efforts to retch and purge, then twenty or thirty drops of laudanum may be given and repeated two or three times, at intervals, of half an hour or more. If this should not succeed, then give one of the opiate pills, and repeat this as the urgency of the case may demand. A pill of solid opium will often remain upon the stomach when nothing else will. If all these means should fail to soothe and moderate the irritation of the stomach and bowels, then an opiate glyster should be administered. Sixty drops or more of laudanum in a tea cup full of water, is an excellent form of glyster; this has often been found to allay a constant vomiting, hiccough and urgent calls to stool, when every other means has proved unsuccessful.

In the form of outward applications,—draughts, warm bath, or bottles of hot water to the feet;—fomentations of hot brandy and laudanum to the stomach and bowels, and even to the head, will very often be found soothing and supporting remedies.

If the symptoms which have been already detailed, should become still more severe, and their exhausting effects upon the constitution be alarming, this failing condition of the vital principle will be known by the following circumstances: there will be every mark of great weakness,—peculiar anxiety of countenance,—severe cramp, and repeated hiccough;—small and irregular pulse;—cold and clammy sweats. These symptoms will call for a bolder and quicker repetition of the means already mentioned, particularly for opiate

injections. Chicken broth, also, with a dose of laudanum in it should be injected, and wine and water with spice, and any thing of a nature calculated to uphold the sufferer's strength, will be proper at such a time.

In every case in which the symptoms abate, and hope begins to dawn, these means must be diminished, both in repetition and dose, but must not be altogether suddenly withdrawn.

FLATULENT CHOLERA.

This differs from common cholera morbus, principally in the quantity of bile, which is rather lessened in this species than augmented. The distressing and dangerous symptoms are not, however, moderated by this circumstance, on the contrary, they are generally more severe;—the concentrated condition of the bile, seems to excite a still more violent action of the intestinal passage and of the nervous system. In this case, therefore, the painful retching and the fruitless efforts to discharge the contents of the bowels, are more painful and exhausting, while the cramp and hiccough is always more constant and severe.

The general treatment of this species, called Flatulent Cholera, is the same as in the common Cholera Morbus, with the exception of the use of purgatives and emetics. In this case it is proper to begin with an emetic. A tea spoonful of flour of mustard in half a pint of warm water, should be taken, and after this a dose of purging pills. Four or five of the No. 1, improved Hygeian pills should be given an hour or so after the emetic, and repeated every third or fourth hour, until some evident effect upon the bowels is produced. After this the different opiate means which have already been directed in the treatment of bilious or common cholera morbus, are to be strictly followed. The diluting drinks, also, such as barley water, &c, are to be freely administered, and the same outward applications to be made use of.

THE SPASMODIC, OR ASIATIC CHOLERA, ITS SYMPTOMS AND TREATMENT.

The disease which is now about to be considered, is the Epidemic Cholera, as it appeared in this and many other countries in 1832,—it

is a severe, rapid and fatal disorder, and one that requires the most prompt and decisive treatment.

The most remarkable and peculiar symptoms of this species of cholera, are the following :—" Watery stools ; retching and vomiting of whitish fluid ; spasms successive and violent, often extending to every organ of the body ; great despondency of mind, and prostration of strength." To this is added, pain at the pit of the stomach ; giddiness ; thirst ; a pulse at the wrist so weak as scarcely to be felt ; the surface of the body and the breath cold ; the tongue also is so cold as to give the sensation of icy coldness to the touch. It is also observed that there is neither bile nor urine, these secretions being suspended by the universal spasms ; the general weakness is so great that the voice fails or sinks into a whisper ; the skin becomes of a bluish color, and is shrivelled up about the feet and hands ; the belly feels like a doughy mass ; the eyes are glazed, and the countenance expresses great anxiety, exhibiting the appearance of great advance of age. Such altogether is the peculiar and distressing aspect of one who is suffering under an attack of genuine spasmodic cholera, that those who have once beheld a case, can never be at a loss to recognise the disease in every other instance. To this it may be added that " the watery stools," are of a dingy color, resembling water in which fresh meat or rice has been washed. It is remarkable also, that the faculties of the mind are often unaffected, so that the patient is able in his latest moments to answer questions clearly and correctly, although only in a whisper, or in short sentences.

The preceding description is a short portraiture of the character and symptoms of that dreadful malady, the epidemic spasmodic cholera.

This form of cholera varies in its mode of attack ; in some instances it comes on suddenly, within an hour or two of its first indications, and in other cases, it may be introduced by mild and premonitory symptoms, for a day or two before its full developement takes place ; —but whether it comes on preceded by mild and premonitory symptoms, or bursts forth suddenly in its terrific form,—the following is the treatment to be employed.

The moment the existence of the disease is ascertained, begin with bleeding. Even if the pulse be so small that you can hardly feel it, you must attempt to bleed. Sometimes it is with great diffi

culty that you can get the blood to flow, but by rubbing the arms, or opening another vein, a little may be obtained, and this generally so much relieves, as to lead to a better circulation and freer flow of blood. It cannot, however, always be accomplished, but it is a most important point gained, when it can be done. The quantity of blood to be taken, may be from sixteen to twenty ounces, but this should be determined by the prior strength and general state and constitution of the individual.

At the same time, or immediately after the bleeding, begin with the calomel and the opium pills. Three of the calomel with one of the opium pills should be given together, and be repeated every four, three, or two hours, according to the emergency of the case. If the retching and urgent calls to stool be not abated, then increase the opiate, and give two of the opium with two of the calomel pills. Sometimes nothing can be made to stay on the stomach for a moment, not even pills, which always remain when any thing at all will;—in this case have recourse to opiate injections. Two tea spoonfuls of laudanum in a tea cup full of any soft warm fluid, may be injected by the instrument, or by the glyster-pipe and bladder, which was recommended to be kept in readiness,—and this may be repeated in half an hour, or an hour or two as circumstances seem to require. It is astonishing to witness the good effect which an opiate thus administered, will often have upon the painful retching and griping stools. As a remedy in these incessant vomitings, ice also has been found an excellent assistant. Small portions may be swallowed every few minutes, and the stomach has often been known to be wonderfully calmed and comforted by it. Chicken tea, beef tea, mint tea, strong toast water, cold or warm, as may be seen to answer best, are also found to be useful remedies; they are to be given as directed in a case of common cholera morbus.

While this is going on,—let the pit of the stomach, the belly, and the limbs, and any part affected with the cramp and spasms, be well rubbed with equal parts of brandy and laudanum, made hot. A cloth soaked in this mixture, should also be laid on the pit of the stomach, and often replaced.

When the violence of the symptoms begins to lessen, then the means which have been directed are to be withdrawn,—but not at once. The calomel pills may be altogether omitted, but the opiate

pills should be continued, though at longer intervals and in smaller doses. One pill every four or six hours may be sufficient, and this gradually discontinued; in the mean while a mild and nutritious diet should be directed.

In the convalescent stage the state of the bowels will require particular attention, and the aperient pills, No. 2, will be called for, both as a gentle laxative, and also as the best means for aiding in the recovery of general health and strength. From three to six of these it would be advisable to take every night and morning, for some time after the patient has got about, confining their operation to a natural relief of the bowels, which otherwise might become overloaded, and occasion a relapse.

THE TREATMENT OF THE PREMONITORY SYMPTOMS OF CHOLERA.

During the late epidemic, when the Spasmodic Cholera did not burst forth suddenly and unexpectedly upon an individual, but became developed in a milder and more gradual manner, the symptoms which preceded the attack were similar to those which indicate a disturbance of the digestive organs, and which are called dyspepsia. These, however, were attended with a more sudden and remarkable degree of weakness than is usual in dyspepsia, and almost always with a disposition to diarrhœa, or laxity of the bowels. These premonitory symptoms chiefly were a sense of chilling, languor, impaired appetite, and some slighter form of common summer complaint; to this sometimes were added pain about the stomach, tight breathing, sighing and vomiting, with occasional slight cramp.

Now, when these symptoms appeared in any one during the prevalence of the epidemic, they were a proof that such individual had been exposed to some of the causes of cholera, and that the disease was just ready to break out in its peculiar and rapid character; indeed, they went further than this, for such symptoms were a part of the disease itself, and were therefore a proof that the cholera had actually begun. In this early stage, however, the disease was almost always very curable, for, those who adopted proper measures for these slight complaints very soon safely got well; while those who used improper measures, especially such as suddenly stopped the

diarrhœa, as soon became involved in all the misery of this frightful malady. It becomes, therefore, a matter of great importance, that the proper treatment of these symptoms should be plainly stated. The essential object to be effected under these circumstances is a removal of the contents of the stomach and intestinal passages; but this must be done by gentle and not by rough and active means. If there is an inclination to vomit as well as purge, it is proper to begin by giving a gentle emetic. A tea spoonful of flour of mustard in half a pint of water is soon procured, and this the author has always found to answer exceedingly well. But if there be no sickness, then begin with two or three of the calomel pills, and in four hours a dose of castor oil should be taken, with the view of quickening the effect of the calomel and causing it to operate with more effect and moderation.

The feet should be bathed in warm water, and the patient keep his bed,—bottles of hot water to the feet, if any chilling is felt are also very useful. Great attention to habits of regularity and to diet will always be indispensably necessary. Raw fruit, vegetables, and every kind of indigestible food must be carefully avoided.

If the premonitory symptoms should have continued too long, and the treatment above recommended should not be followed by returning health, and particularly a more natural appearance of the stools, —then another dose of calomel and castor oil should be administered as before directed. After this, should the alarming sensations of increasing spasms threaten a more violent train of symptoms, the means directed for the treatment of spasmodic cholera must be adopted, of which bleeding is the first and most important part.

MEANS FOR SECURING GENERAL HEALTH DURING THE PREVALENCE OF CHOLERA.

Having in the foregoing remarks been anxious to furnish every plain and necessary direction for the treatment of cholera, it seemed expedient to make some further observations upon the subject of a certain general state of health, which affords the best security against the attack of this disease. When speaking on the causes to be avoided during the epidemic prevalence of cholera, it was observed

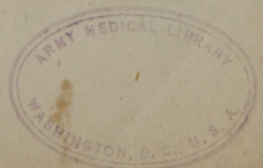
that a neglected state of constipation, as well as the use of improper means to check an unusual relaxation of the bowels, were equally causes of a dangerous kind. Nothing affords more general security against the cholera than a healthy condition of the organs of digestion; but these are often known to creep into disorder so gradually and insidiously, that the patient hardly knows that he is the subject of it. It cannot be said that these organs are in health when the bowels are costive or irregular, the evacuations dark or unnatural in color, and the tongue foul and loaded in the morning. These always denote derangement of the organs of digestion, and are almost always seen together, but it often happens that the individual has never noticed them until they have been pointed out by his physician as the cause of some other subject of complaint. This subject is worthy of great attention, for the writer does not hesitate to affirm that the disordered condition of the organs of digestion constitutes a more general cause of cholera than any other.

At such a time, therefore, it is advised that every person should pay a due regard to the regularity of the bowels, the color of the evacuations and the state and condition of the tongue, and if these are such as have already been described,—depend upon it, he is far more open to an attack of cholera than he is aware of, and it therefore becomes his duty to remove these disordered symptoms by the following easy and effectual means.

Whoever will take the trouble to peruse the remarks which were made in page 20, &c.* on the subject of the Improved Hygeian Pills, No. 2, will see the peculiar manner in which they are calculated to effect this purpose. The object is, first, to evacuate the accumulations of the bowels, and then support this healthy and natural action of the intestinal passages. A free evacuating dose of No. 1, should therefore first be given, and then a daily dose of No. 2, should be continued, until the proper color of the evacuations and the regular action of the bowels be established. The only proper color of the alvine evacuations, is a yellowish brown, or rhubarb color, and it is important to examine occasionally the secretions of the bowels, to know if they are of a healthy color and consistence.

If, on the contrary, there should be diarrhœa or summer complaint,—the same treatment is requisite;—the offending materials

* Of the Domestic Treatise.



should be carried off with a dose of No. 1,—or a dose of castor oil, and the mild and strengthening aperients, No. 2, be afterwards taken and continued daily. These may appear simple means, but they are not less efficient on that account; it is the duty of every individual to adopt them, and inasmuch as it is wiser to prevent than to cure diseases, they may be justly ranked among the most important objects of concern.

One of the exciting causes of cholera mentioned, was a sudden check to perspiration. The healthy condition of the skin is a point of great importance. Any sudden alteration in the functions of the skin is often quickly conveyed to the bowels, and it is well known that a disordered action of the bowels has frequently been the first evident sign of the beginning of the cholera. It will therefore be proper to be very guarded in making alterations in the dress, on account of the heat of the weather. It is by no means safe for those who have been accustomed to the use of flannel to leave it off;—it may be exchanged for flannel of a thinner kind, but not for cotton. This remark applies to other parts of dress. The use of the tepid bath is an excellent means of securing a healthy condition of the skin, and through this medium a regular and healthy action of the bowels. A bath of salt water is the best for such a purpose, but when this cannot be obtained, the author has frequently directed a towel to be used, soaked in a strong solution of salt and water, and dried in the sun;—with this the whole surface of the body should be long and briskly rubbed.

It has frequently been remarked that the diet is to be always a subject of attention. It should be simple, and perhaps more sparing than usual, but not reduced in quality. A low diet is not suitable at a time of cholera, and, unless in habits of intemperance, any material change in the accustomed beverage, is not advisable.